



2009 JOINT SERVICE POWER EXPO

New Orleans, LA

4 - 7 May 2009

Agenda

USMC Organizations Involved in Research and Acquisition

Tuesday, May 5, 2009

WELCOMING REMARKS:

- Matt Kallmyer, Deputy Director, New Orleans Office Of Homeland Security and Emergency Preparedness

LUNCHEON SPEAKER:

- "OSD Manufacturing Technology Overview", Ms. Adele Ratcliff, OSD MANTECH Program

PRIMARY BATTERIES

- 8461 - "Development of a "Half-Sized" BA-5590 with Li/CFx Cells", Dr. Gregg C. Bruce, EaglePicher Technologies
- 8472 - "High Capacity Li/CFx battery with -70C to 145C Operational Range", Dr. Hisashi Tsukamoto, PhD, CEO/CTO Quallion, LLC

FUEL CELLS I

- 8288 - "Joint Defense Manufacturing Technology Panel (JDMTP) Power Sources Technical Working Group (TWG) Fuel Cell Roadmap", Mr. Francis P. Sokolowski, Industrial Engineer, DCMA
- 8372 - "U.S. Army CERDEC's Soldier and man Portable Fuel Cell Evaluation and Field Testing", Mr. Michael Dominick,, US Army CERDEC, Army Power Division, Fuel Cell Development Team
- 8368 - "Lessons Learned from the Defense Logistics Agency's Hydrogen and Fuel Cell Demonstration Project at Defense Depot Susquehanna, PA (DDSP)", Mr. Kenneth Burt, NSWC Crane Division

RECHARGEABLE BATTERIES

- 8376 - "Advanced Lithium Power Sources - Real World Experiences and Next Steps", Mr. Jim Hess, Director of Defense Sales, SAFT America
- 7770 - "Battery Requirements for Application of Lithium Ion and Lithium Polymer To Achieve Standardization and Improved Reliability", Mr. William R. Johnson, Manager AIR-4.4.5.2 Electrical Power.
- 8474 - "Quallion Large Battery Pack Technology", Dr. Hisashi Tsukamoto, PhD, CEO/CTO Quallion, LLC

FUEL CELLS II

- 8312 - "Direct Methanol fuel Cells: Lightweight, Portable Power for Soldiers in the Field", Mr. Christian Boehm, Director, Defense Division Smart Fuel Cell AG & Inc
- 8484 - "Development of a Solid Oxide Fuel Cell Utilizing Logistics Fuels", Dr. Neil Fernandes, Acumentrics
- "GEI MX5 High-Temperature PEM Fuel Cells Military Applications", K.J. Berry, Ph.D, P.E., President and CEO, Global Energy Innovations

CROSS-CUTTING POWER

- 8463 - "Integrated Starter Generator - More than a 24V Vehicle Power Supply", Mr. Thomas Trzaska, L3 Communications
- 8488 - "The Role of Solid State Power Controllers in Smart Power Management and Distribution", Mr. William Thorp, Senior Electrical Engineer, Data Device Corporation
- 8442 - "Waste Gasification by the Use of Novel Plasma System", Mr. Rod B. Vera, Plasma Waste Cycling

Wednesday, May 6, 2009

LUNCHEON SPEAKER: *"An Exploration of Threats, Solutions and Alternative Futures"*, (paper) (slides) Mr. Larry C. Triola, Energy and National Security

MOBILE ELECTRIC POWER

- 8377 - *"Mobile Electric Power for Today and Tomorrow"*, Mr. Michael C. Padden, Project Manager Mobile Electric Power (PM MEP)

USMC WAY FORWARD

- 7990 - *"USMC Future Energy Posture"*, Mr. Michael Boyd
- 7989 - *"USMC Power and Energy Future Focus"*, Mr. Mike Gallagher, Program Manager - Expeditionary Power Systems, Marine Corps Systems Command
- 8308 - *"USMC Portable Power R&D Effort"*, Mr. Clint J. Govar, Power Systems Engineer, Marine Corps Systems Command

LARGE SCALE POWER

- 8503 - *"Army Large Scale Power"*, Mr. Kevin Sargent, U.S. Army Maneuver and Support Center (MANSCEN), Capabilities Determination and Integration Division, Combat Developer - Prime Power Requirements
- 8411 - *"Enterprise Power Selection"*, Mr. Vincent Polino, NOVA Power Solutions, Inc
- 8493 - *"Power Conversion Technologies for Improved System Performance"*, Kaz Furmanczyk, Crane Aerospace & Electronics

FUTURE FOCUS ON POWER

- 8307 - *"Future Naval Capability Update: Advanced Power Generation"*, Mr. Clint J. Govar, Power Systems Engineer, Marine Corps Systems Command
- 8448 - *"USN Maritime Surveillance Power Requirements for Future Deployable Systems"*, Mr. Jeffrey Lloyd, SPAWAR Systems Center - Pacific
- 8412 - *"NDIA Military Power Sources Committee"*, Ms. Rebecca Morris, ACI Technologies

ON-BOARD VEHICLE POWER I

- 8378 - *"USMC On-Board Vehicle Power Requirements and Programs"*, Mr. Jonathan Carpenter, P.E. Lead Engineer, Marine Corps Systems Command
- 8352 - *"OBVP from Legacy to Next Generation"*, Dr. Brent Brzezinski, DRS Test & Energy Management
- 8391 - *"MTV Onboard Vehicle Power-Program Update"*, Mr. Nader Nasr, Oshkosh Corporation

SAFETY

- 8502 - *"When Batteries Go Bad"*, Ms. Julie Banner, Systems & Materials for Power & Protection Branch, Naval Surface Warfare Center, Carderock Division
- 8475 - *"Critical Power Needs for Life and Safety"*, Dr. Joseph G. Palsa, P.E., Clary Corporation
- 8482 - *"Ni-Cd Battery Separator System that Improves Battery Reliability and Increases Charge Stability by Orders of Magnitude at Little or No Cost Increase"*, Mr. Baird C. Newman, Mechanical Engineer, Crane Division, Naval Surface Warfare Center

CONNECTORS

- 8470 - *"Improved Battery/Power Connectors for Aircraft and other High Current Applications"*, Mr. Nate Bower,

VEHICLE BATTERY MAINTENANCE

- 8321 - *"Battery Maintenance and Sustainment"*, Mr. Mark D. Abelson, PulseTech Products Corporation
- 8365 - *"Power for Vehicle and Battery-Operated Weapon Systems"*, Mr. Micheal J. Bissonnette, Team Lead/L-3 Communications Support Expeditionary Power Systems, Marine Corps Systems Command

PORTABLE SUPPORT EQUIPMENT

- 8483 - *"A Field-Portable Lithium Ion Battery Charger with UPS Back-up Capability"*, Mr. Neil Steven Graves, Acumentrics
- 8394 - *"Kestrel - Falcon III Radio Power Adapter/Charger (AN/PRC-117G)"*, Mr. Edward J. O'Rourke, Iris Technology Corporation

Thursday, May 7, 2009

POWER DISTRIBUTION I

- 8382 - *"Intelligent Power Management & Distribution"*, Ms. Michelle N. Gaffney, CERDEC
- 7934 - *"Micro Grids: Harnessing & Managing Multiple Energy Resources"*, Mr. Tom Lederle, NEST Energy Services
- 8458 - *"Micro Grid Development for the Tactical Operation Center"*, Ms. Teri Hall, Electrical Engineering Staff, Lockheed Martin

ON-BOARD VEHICLE POWER II

- 8384 - *"High Temperature PEM Fuel Cell/Lithium Ion Hybrid Power Source for Ground, Air and Sea"*, Mr. Michel Fuchs, EnerFuel

- 8364 - “*Power and Energy Management for Heavy Tactical Vehicles*”, Mr. Chris M. Rogan, P.E., Penn State ARL
 1. video .avi video files
- 8399 - “*Auxiliary Power Unit for Military Vehicles*”, Mr. Jeffrey S. Humble

RENEWABLES

- 7933 - “*Mobilizing Renewable Energy for Field Applications*”, Mr. Tom Lederle, NEST Energy Services
- 8358 - “*Hybrid Power Systems for Mission Critical Enterprise Land Mobile*”, Mr. Mark H. Viness, E.I. T, Motorola National Site Design and Integration Team
- 8393 - “*StarPower Technology - Solar Charging, Power Management and Distribution*”, Mr. Edward J. O’Rourke, Iris Technology Corporation
- “*Renewable Power in OIF*”, Mr. Daryl Wilson, Former Expeditionary Power Systems FSR in Iraq, L-3 Communications

POWER DISTRIBUTION II

- 8392 - “*QP-1800 Inverter System - USMC Workhorse*”, Mr. Edward J. O’Rourke, Iris Technology Corporation
 1. QP-1800 Transportation Testing .wmv video file
 2. QP-1800 Testing .wmv video file
- 8386 - “*30 kW Exportable Power System for Military Tactical Vehicles*”, Ms. Jennifer L. Grudnoski, GS Engineering
- 7764 - “*Maximizing Power Production from the Stock, Belt-Driven Alternator Using a Practical Constant Speed Drive*”, Mr. Scott McBroom
 1. CVAD on FMTV at BAE .wmv video files

ON-BOARD VEHICLE II

- 8362 - “*Alternative Squad Power: Taking Advantage of Solar, Fuel Cell and Scavenged Power at the Squad Level*”, Mr. Greg Cipriano, VP, Marketing & Military Development, Protonex

HYBRIDS

- 8381 - “*System Consideration When Integrating New Battery Technologies into the XM1124 Hybrid Electric HMMWV*”, Dr. Michael J. Marcel, DRS Test and Energy Management
- 8385 - “*A Mobile Hybrid Power Source with Intelligent Control*”, Mr. Rick Silva, Sr. System Engineer, Custom Manufacturing & Engineering, Inc
- 8371 - “*New Application of Lithium-Ion Battery in Hybrid Power Supply System*”, Mr. Takefumi Inoue, GS Yuasa Corporation

*Schedule at a Glance*Monday, May 4, 2009

9:00 a.m. - 5:00 p.m. Exhibitor Move-in

Tuesday, May 5, 2009

8:30 a.m. - 11:30 a.m. Opening General Session

10:00 a.m. - 5:00 p.m. Exhibit Hall Open

11:30 a.m. - 1:00 p.m. Lunch in Exhibit Hall

1:00 p.m. - 5:00 p.m. Conference Sessions

6:00 p.m. - 8:00 p.m. Conference Reception in Exhibit Hall

Wednesday, May 6, 2009

8:30 a.m. - 11:30 a.m. Conference Break-out Sessions

9:00 a.m. - 5:00 p.m. Exhibit Hall Open

11:30 a.m. - 1:00 p.m. Lunch in Exhibit Hall

1:00 p.m. - 4:00 p.m. Conference Break-out Sessions

Thursday, May 7, 2009

8:00 a.m. - 11:30 a.m. Conference Break-out Sessions

9:00 a.m. - 12:00 p.m. Exhibit Hall Open

11:30 a.m. Adjourn

12:00 p.m. - 5:00 p.m. Exhibitor Move-out

MONDAY, MAY 4, 20099:00 a.m. - 5:00 p.m. Exhibitor Move-in & Registration
Exhibit Hall B1 & Hall B1 Foyer
Ernest N. Morial Convention Center3:00 p.m. - 5:00 p.m. Early Registration Check-in
Exhibit Hall B1 Foyer
Ernest N. Morial Convention Center**TUESDAY, MAY 5, 2009**7:00 a.m. - 9:00 a.m. Exhibitor Move-in & Registration Continues
Exhibit Hall B1 & Hall B1 Foyer7:30 a.m. - 8:15 a.m. Continental Breakfast
Room 225/226/227
Ernest N. Morial Convention Center8:15 a.m. - 8:30 a.m. Opening Session Prelude
Brass Quintet from the
Marine Forces Reserve Band
Riverside Rooms (R02/03/04/05)

8:30 a.m. - 11:30 a.m. Opening Session

8:30 a.m. - 8:35 a.m. Administrative Remarks

8:35 a.m. - 8:40 a.m. Color Guard
377th Theater Support Command
Special Troops Battalion

8:40 a.m. - 9:00 a.m. Welcoming Remarks

- Matt Kallmyer,
Deputy Director,
New Orleans Office of Homeland
Security and Emergency Preparedness

9:00 a.m. - 10:00 a.m. General Session

- Keynote Speaker

Mr. Patrick B. Davis
Program Manager
Office of Vehicle Technologies Program,
Energy Efficiency and Renewable
Energy
U.S. Department of Energy

TUESDAY, MAY 5, 2009 (CONTINUED)

10:00 a.m. - 5:00 p.m.	Exhibit Hall Open Exhibit Hall B1 Foyer Ernest N. Morial Convention Center
10:00 a.m. - 10:30 a.m.	Coffee Break in Exhibit Hall Exhibit Hall B1
10:30 a.m. - 11:30 a.m.	General Session (continues) Riverside Rooms (R02/03/04/05) <ul style="list-style-type: none"> • OIF Session Moderator: CWO5 Pam Good (USMC) "Past, Current Projected Ops for Power Missions & Lessons Learned in Iraq"
11:30 a.m. - 1:00 p.m.	LUNCH in Exhibit Hall Exhibit Hall B1 Luncheon Speaker <ul style="list-style-type: none"> • Ms. Adele Ratcliff OSD MANTECH Program
1:00 p.m. - 2:30 p.m.	Conference Break-out Sessions <ul style="list-style-type: none"> • Primary Batteries Room 228/229/230 • Fuel Cells I Room 217/218
2:30 p.m. - 3:00 p.m.	Coffee Break in Exhibit Hall Exhibit Hall B1
3:00 p.m. - 5:00 p.m.	Conference Break-out Sessions <ul style="list-style-type: none"> • Rechargeable Batteries Room 228/229/230 • Fuel Cells II Room 217/218 • Cross-Cutting Power Room 231/232
5:00 p.m. - 6:00 p.m.	Free Time, Exhibit Hall Closed
6:00 p.m. - 8:00 p.m.	Conference Reception in Exhibit Hall Exhibit Hall B1 Ernest N. Morial Convention Center

Highlights will include:

Tuesday, May 5, 2009

- Keynote Speaker:

Mr. Pat Davis (DoE)

- OIF Session

- Luncheon Speaker:

*Adele Ratcliff**OSD MANTECH Program*Break-out Sessions:

- Primary Batteries
- Fuel Cells I & II
- Rechargeable Batteries
- Cross-Cutting Power
- Mobile Electric Power
- USMC Way Forward
- Large Scale Power
- Future Focus on Power
- On-Board Vehicle
Power I, II & III
- Safety
- Connectors
- Vehicle Battery Maintenance
- Portable Support Equipment
- Power Distribution I & II
- Renewables
- Hybrids

Highlights will include:

Wednesday, May 6, 2009

- Luncheon Speaker:

Mr. Larry C. Triola
Energy and National Security

Wednesday, May 6, 2009

7:30 a.m. - 8:30 a.m.	Continental Breakfast Room 225/226/227 Ernest N. Morial Convention Center
8:30 a.m. - 9:30 a.m.	Conference Break-out Sessions continue <ul style="list-style-type: none"> • Mobile Electric Power Room 228/229/230
9:00 a.m. - 5:00 p.m.	Exhibit Hall Open Exhibit Hall B1 Foyer Ernest N. Morial Convention Center
9:30 a.m. - 10:00 a.m.	Coffee Break in Exhibit Hall Exhibit Hall B1
10:00 a.m. - 11:30 a.m.	Conference Break-out Sessions continue <ul style="list-style-type: none"> • USMC Way Forward Room 228/229/230 • Large Scale Power Room 217/218
11:30 a.m. - 1:00 p.m.	LUNCH in Exhibit Hall Exhibit Hall B1 Luncheon Speaker <ul style="list-style-type: none"> • Mr. Larry C. Triola Futurist for the Warfare Systems Concepts Branch Warfare Analysis & Advanced Concepts Division, Warfare Systems Department Naval Surface Warfare Center, Dahlgren Division
1:00 p.m. - 2:30 p.m.	Conference Break-out Sessions continue <ul style="list-style-type: none"> • Future Focus on Power Room 228/229/230 • On-Board Vehicle Power I Room 217/218 • Safety Room 231/232
2:30 p.m. - 3:00 p.m.	Coffee Break in Exhibit Hall Exhibit Hall B1

Wednesday, May 6, 2009 (continued)

- 3:00 p.m. - 4:00 p.m. Conference Break-out Sessions continue
- Vehicle Battery Maintenance
Room 228/229/230
 - Portable Support Equipment
Room 217/218
 - Connectors
Room 231/232

*- Evening Free -***Thursday, May 7, 2009**

- 7:30 a.m. - 8:00 a.m. Continental Breakfast
Room 225/226/227
Ernest N. Morial Convention Center
- 8:00 a.m. - 9:30 a.m. Conference Break-out Sessions continue
- Power Distribution I
Room 228/229/230
 - On-Board Vehicle Power II
Room 217/218
 - Renewables
Room 231/232
- 9:00 a.m. - 12:00 p.m. Exhibit Hall Open
Exhibit Hall B1 Foyer
Ernest N. Morial Convention Center
- 9:00 a.m. - 12:00 p.m. "View Exhibits Only" General Public
Exhibit Hall B1 Foyer
Ernest N. Morial Convention Center
- 9:30 a.m. - 10:00 a.m. Coffee Break in Exhibit Hall
Exhibit Hall B1
- 10:00 a.m. - 11:30 a.m. Conference Break-out Sessions continue
- Power Distribution II
Room 228/229/230
 - On-Board Vehicle Power III
Room 217/218
 - Hybrids
Room 231/232
- 11:30 a.m. Adjourn
- 12:00 p.m. - 5:00 p.m. Exhibitor Move-out

Break-out Sessions:

- Primary Batteries
- Fuel Cells I & II
- Rechargeable Batteries
- Cross-Cutting Power
- Mobile Electric Power
- USMC Way Forward
- Large Scale Power
- Future Focus on Power
- On-Board Vehicle
Power I, II & III
- Safety
- Connectors
- Vehicle Battery Maintenance
- Portable Support Equipment
- Power Distribution I
- Renewables
- Power Distribution I & II
- Hybrids

Tuesday, May 5, 2009

Session Title 1:00 p.m. - 2:30 p.m.	Primary Batteries Room 228/229/230		Fuel Cells I Room 217/218		
Moderator	Mike Brundage (Army)		Justin Govar (USMC)		
2-A	8351 Ms. Rebecca M. Morris Advanced Commercial Battery Packaging Technology to Improve Battery Availability for Navy, Army, and Air Force Survival Systems	4-A	8288 Mr. Francis P. Sokolowski Joint Defense Manufacturing Technology Panel (JDMTP) Power Sources Technical Working Group (TWG) Fuel Cell Roadmap		
2-B	8461 Dr. Gregg C. Bruce Development of a "Half-Sized" BA-5590 with Li/CFx Cells	4-B	8372 Mr. Michael Dominick U.S. Army CERDEC's Soldier and Man Portable Fuel Cell Evaluation and Field Testing		
2-C	8472 Dr. Hisashi Tsukamoto High Capacity Li/CFx battery with -70°C to 145°C Operational Range	4-C	8368 Mr. Kenneth Burt Lessons Learned from the Defense Logistics Agency's Hydrogen and Fuel Cell Dem- onstration Project at Defense Depot Susquehanna, PA (DDSP)		
2:30 p.m. - 3:00 p.m.	Coffee Break in Exhibit Hall				
3:00 p.m. - 5:00 p.m.	Rechargeable Batteries Room 228/229/230		Fuel Cells II Room 217/218		Cross-Cutting Power Room 231/232
	Don Brockel (Army)		Nick Foundos (FBI)		
3-A	8376 Mr. Jim Hess Advanced Lithium Power Sources – Real World Experiences and Next Steps	5-A	8464 Mr. Mack W. Knobbe Portable Electrical Power Supply for Aeromedical Evacuations	6-A	8283 Mr. Luis Villarreal Lithium Non-rechargeable Batteries Production Improvements
3-B	7770 Mr. William R. Johnson Standardization of Aircraft Batteries Using Lithium Re- chargeable Batteries	5-B	8312 Mr. Christian Boehm Direct Methanol Fuel Cells: Lightweight, Portable Power for Soldiers in the Field	6-B	8463 Mr. Thomas Trzaska Integrated Starter Generator – More than a 24V Vehicle Power Supply
3-C	8474 Dr. Hisashi Tsukamoto Large Format Li Ion Replacement Packs for Lead Acid Applications	5-C	8501 Mr. Ian Kaye Mission Flexible, Smart, Fuel Cell Power Solutions for Remote and Long Runtime Man Portable Use	6-C	8488 Mr. William Thorp The Role of Solid State Power Con- trollers in Smart Power Manage- ment and Distribution
3-D	8496 Mr. John Heinzel Advanced Battery-Based Energy Storage Systems for Uninter- ruptible Power Supply, Single Generator Operations Applica- tion	5-D	8484 Dr. Neil Fernandes Development of a Solid Oxide Fuel Cell Utilizing Logistics Fuels	6-D	8442 Mr. Rod B.Vera Waste Gasification by the Use of Novel Plasma System
5:00 p.m.	Adjourn - Free time until Reception in Exhibit hall				

Wednesday, May 6, 2009

7:30 a.m. - 8:30 a.m.	Continental Breakfast Room 225/226/227				
Session Title 8:30 a.m. - 9:30 a.m.	Mobile Electric Power Room 228/229/230				
Moderator	Regina Daniels (PM-MEP)				
7-A	8377 Mr. Michael C. Padden Mobile Electric Power for Today and Tomorrow				
9:30 a.m. - 10:00 a.m.	Coffee Break in Exhibit Hall				
Session Title 10:00 a.m. - 11:30 a.m.	USMC Way Forward Room 228/229/230		Large Scale Power Room 217/218		
Moderator	Joanne Martin (USMC)		Ken Burt (Navy)		
8-A	7990 Mr. Michael Boyd USMC Future Energy Posture		11-A	8503 Mr. Kevin Sargent Army Large Scale Power	
8-B	7989 Mr. Mike A. Gallagher USMC Power and Energy Future Focus		11-B	8411 Mr. Vincent Polino Enterprise Power Selection	
8-C	8308 Mr. Clint J. Govar U.S. Marine Corps Portable Power R&D Effort		11-C	8493 Mr. Mark J. Stefanich Power Conversion Technologies for Improved System Performance	
11:30 a.m. - 1:00 p.m.	Lunch in the Exhibit Hall Luncheon Speaker: Mr. Larry C. Triola, Energy and National Security				
Session Title 1:00 p.m. - 2:30 p.m.	Future Focus on Power Room 228/229/230		On-Board Vehicle Power I Room 217/218		Safety Room 231/232
Moderator	Kyle Werner (Navy)		Mike Bissonnette (USMC)		Pat Lyman (Army)
9-A	8307 Mr. Clint J. Govar Future Naval Capability Update: Advanced Power Generation		12-A	8378 Mr. Jonathan Carpenter, P.E. USMC On-Board Vehicle Power Requirements and Programs	14-A 8502 Ms. Julie Banner When Batteries Go Bad
9-B	8448 Mr. Jeffrey Lloyd USN Maritime Surveillance Power Requirements for Future Deployable Systems		12-B	8352 Dr. Brent Brzezinski OBVP from Legacy to Next Generation	14-B 8475 Dr. Joseph G. Palsa P.E. Clary Corporation Critical Power Needs for Life and Safety
9-C	8412 Ms. Rebecca Morris NDIA Military Power Sources Committee		12-C	8391 Mr. Nader Nasr MTVR Onboard Vehicle Power -- Program Update	14-C 8482 Mr. Baird C. Newman Ni-Cd Battery Separator System that Improves Battery Reliability and Increases Charge Stability by Orders of Magnitude at Little or No Cost Increase

Wednesday, May 6, 2009 (continued)

2:30 p.m. - 3:00 p.m.	Coffee Break in Exhibit Hall				
Session Title 3:00 p.m. - 4:00 p.m.	Connectors Room 231/232		Vehicle Battery Maintenance Room 228/229/230		Portable Support Equipment Room 217/218
Moderator	Frank Sokolowski (DCMA)		Jonathon Carpenter (USMC)		Don Brockel (Army)
10-A	8380 Ms. Rebecca M. Morris Military Power Connector Advancements to Improve Per- formance and to Reduce Costs	13-A	8321 Mr. Mark D. Abelson Battery Maintenance and Sustainment	15-A	8483 Mr. Neil Steven Graves A Field-Portable Lithium Ion Battery Charger with UPS Back-up Capability
10-B	8470 Mr. Nate Bower Improved Battery/Power Con- nectors for Aircraft and Other High Current Applications	13-B	8365 Mr. Michael J. Bissonnette Power for Vehicle and Battery-Operated Weapon Systems	15-B	8394 Mr. Edward J. O'Rourke Kestrel – Falcon III Radio Power Adapter/Charger (AN/PRC- 117G)
4:00 P.M.	Adjourn for the day				
Thursday, May 7, 2009					
7:30 a.m. - 8:00 a.m.	Continental Breakfast Room 225/226/227				
Session Title 8:00 a.m. - 9:30 a.m.	Power Distribution I Room 228/229/230		On-Board Vehicle Power II Room 217/218		Renewables Room 231/232
Moderator	Regina Daniels (PM-MEP)		Jonathon Carpenter (USMC)		Malar Motley (USMC)
16-A	8382 Ms. Michelle N. Gaffney Intelligent Power Management & Distribution	18-A	8384 Mr. Michel Fuchs High Temperature PEM Fuel Cell/Lithium Ion Hybrid Power Source for Ground, Air, and Sea	20-A	7933 Mr. Tom Lederle Mobilizing Renewable Energy for Field Applications
16-B	7934 Mr. Tom Lederle Micro Grids: Harnessing & Managing Mul- tiple Energy Resources	18-B	8364 Mr. Chris M. Rogan, P.E. Power and Energy Management for Heavy Tacti- cal Vehicles	20-B	8358 Mr. Mark H. Viness Hybrid Power Systems for Mission Critical Enterprise Land Mobile
Session Title 8:00 a.m. - 9:30 a.m.	Power Distribution I Room 228/229/230		On-Board Vehicle Power II Room 217/218		Renewables Room 231/232

Thursday, May 7, 2009 (continued)

Moderator	Regina Daniels (PM-MEP)		Jonathon Carpenter (USMC)		Malar Motley (USMC)
16-C	8458 Ms. Teri Hall Micro-Grid Development for the Tactical Operation Center	18-C	8399 Mr. Jeffrey S. Humble Auxiliary Power Unit for Military Vehicles	20-C	8393 Mr. Edward J. O'Rourke StarPower Technology – Solar Charging, Power Management and Distribution
9:30 A.M. – 10:00 A.M.	Coffee Break in Exhibit Hall				
Session Title 10:00 a.m. – 11:30 a.m.	Power Distribution II Room 228/229/230		On-Board Vehicle Power III Room 217/218		Hybrids Room 231/232
Moderator	Keith DeVries (Navy)		Michelle Gaffney (Army)		Justin Govar (USMC)
19-A	8392 Mr. Edward J. O'Rourke QP-1800 Inverter System – USMC Workhorse	17-A	8370 Mr. Patrick Marshall RAPS – A Universal Power Supply	21-A	8381 Dr. Michael J. Marcel System Considerations When Integrating New Battery Technologies into the XM1124 Hybrid Electric HMMWV
19-B	8386 Mrs. Jennifer L. Grudnoski 30 kW Exportable Power Sys- tem for Military Tactical Vehicles	17-B	8362 Mr. Greg Cipriano Alternative Squad Power: Taking Advantage of Solar, Fuel Cell, and Scavenged Power at the Squad Level	21-B	8385 Mr. Rick Silva A Mobile Hybrid Power Source with Intelligent Control
19-C	7764 Mr. Scott McBroom Maximizing Power Production from the Stock, Belt-Driven Alternator Using a Practical Constant Speed Drive	17-C	8361 Mr. Phil Robinson Soldier Power Management: Lightening the Load Through Active Battery Charge/Discharge Management	21-C	8371 Mr. Takefumi Inoue New Applications of Lithium-Ion Battery in Hybrid Power Supply System
11:30 a.m.	2009 Joint Service Power Expo Adjourns				
Post-JSPE Expo Meetings	USMC Meeting Room 228/229/230		Shelf Life Meeting Room 214		NDIA Manufacturing Divi- sion Military Power Sources Meeting Room 217/218

Patrick Davis is the Program Manager of the Vehicle Technologies Program Office at the U. S. Department of Energy. Vehicle Technologies supports over \$270 million in annual research funding for hybrid drivetrains, advanced batteries, lightweight materials, advanced combustion and fuels, vehicle systems integration, and deployment activities. He is responsible for two major government industry partnerships, the FreedomCAR and Fuel Partnership and the 21st Century Truck Partnership. Patrick also serves on the Board of Directors of the American National Standards Institute.

Mr. Davis previously served as a senior advisor for transportation technologies in the office of Energy Efficiency and Renewable Energy, as the Acting Program Manager of the Office of Hydrogen, Fuel Cells and Infrastructure Technologies, Team Leader for Hydrogen Production, Team Leader for Fuel Cell Technology, co-chair of two FreedomCAR and Fuel Partnership Technical Teams, and the U.S. representative to the International Energy Agency's Hydrogen Implementing Agreement.

Mr. Davis is a Chemical Engineer with over 25 years of experience in the development of vehicle, alternative fuel, and electrochemical technologies.

Ms. A Adele Ratcliff is the OSD Director, Manufacturing Technology (ManTech) for ODUSD Advanced Systems & Concepts (AS&C). She has a long acquisition career, including Program Manager for the congressionally mandated Defense Acquisition Challenge Program (DAC), Deputy Program Manager for the Foreign Comparative Test (FCT) Program and more than eleven years in Air Force Test and Evaluation at Eglin AFB. As Test Manager, she guided the Air Force ACAT II Wind Corrected Munitions Dispenser (WCMD) test program from prototype through Milestone C decision, earning the AF Civilian Test Engineer of the Year Award. More importantly, her efforts positioned WCMD to support the initial phases of Operation Enduring Freedom. She is a proud alumnus of the Mississippi State University Bulldogs, earning a BS in Mechanical Engineering in 1988.



Mr. Larry C. Triola is the NSWCCD Director of Science and Technology. His engineering career with the Navy began in 1976 at Port Hueneme, California. After 2 years on assignment at the Aegis Combat Systems Engineering Developments Site (CSEDS) in Moorestown, New Jersey, he transferred to Dahlgren in 1979. His team's performance at CSEDS earned them written commendation from Rear Admiral Wayne E. Meyer, the Chief of Naval Operations, and the Secretary of the Navy. He has served in the OPNAV office for RDT&E involved in S&T Requirements. He served 6 years as Deputy Chief Scientist for DRPM Aegis/PEO Surface Combatants where he was awarded the Aegis Excellence Award by Rear Admiral Huchting. He obtained degrees in psychology and electrical engineering from the University of Houston and attended graduate school at Baylor College of Medicine. He is a member of Tau Beta Pi engineering honors fraternity, IEEE, the Old Crows, and Mensa. He is the current Chairman of the Technical Advisory

Board of the NSWCCD Technical Digest.